Survey of Dynamic Voltage Scaling Methods for Energy Efficient Embedded Systems

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The power consumption of embedded devices is becoming more and more important, thus the energy efficiency needs to be optimized. Today's embedded hardware components (CPU, memory etc) make it possible to scale both their voltage level and their frequency dynamically in order to achive optimum energy consumption and meet computation time limitations at the same time.

In this paper we have collected some algorithms that use dynamic voltage and frequency scaling and have set comparison criteria to compare them. The comparison of the methods is done using XEEMU: an improved XScale power simulator.

References

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